Down Memory Lane Forerunners of Music and the Moving Image

by Reynold Weidenaar

Music and moving images are two of the most powerful means of shaping human awareness. Small wonder that there has long been a fascination in uniting the two. They work their magic on us in such different ways, yet go wonderfully well together. We have now likely entered an era in which music and the moving image are harnessed together more often than they are allowed to go their separate ways.

We tend to think we have thus inaugurated a brand new idea, but as with so many "innovations," there is not much really new under the sun. Precedents have been building up to this development for well over 100 years, making use of the still image before Edison invented motion pictures in 1889.

One of the most interesting such uses was the illustrated song - as popular a craze at the turn of the century as MTV is today. A set of 12 to 16 hand-colored photographic slides depicted the events, locales, and situations of a popular song. It was usually a ballad or a march, and there was one slide for each line of the lyric. These were projected onto a screen as live singers and musicians performed the song. In the earliest days, calcium-illuminated "magic lanterns" were used, later replaced by electric-lamp projectors. The whole idea started with comic singer Tony Pastor in 1863. To a tune called "Heroes of the War," Pastor added slides of generals and battle scenes He presented this illustrated song until the Civil War ended, then gave up his slides and returned to comedy. No one else seems to have picked up the idea until a singer named Allen May revived it in 1895. He was soon followed by others, supplied with slides by publishers who found that this was the fastest, most effective way to plug their songs into hits. Soon no vaudeville or music hall show was complete without illustrated songs, usually about every third number. There was no admission fee, but patrons were expected to buy beer frequently to keep their seats. It was a nickel a glass at the tables, or twenty-five cents a bottle if sipped with one of the "actresses" in the boxes or the green room.

By 1908 there were ten thousand motion picture theatres across the country, and most were adding illustrated songs to their programs. They became the perfect filler while movie projectionists had to change reels. The demand ran so high that four thousand sets of slides were made of the most popular songs — such as "Neath the Shade of the Old Apple Tree." Many of the sets served from thirty to a hundred singers. Some of the smaller nickelodeon houses accompanied their slides with cylinder records instead of live singers. The phonographic players were mounted with huge double horns, so that the music could fill an entire theatre with low-fidelity sound.

In 1911 a new hit, Irving Berlin's "Alexander's Ragtime Band," ushered in a new style of music. Although it happened to be an illustrated song itself, it was also very energetic dance music. The sentimental ballad was on the way out, and the slides went with it. One music publisher's im-

aginative press agent bucked the trend by touting "I Never Knew Till Now" as so popular that a new chorus slide was needed for every performance. It seems that at each show the singer had to repeat the chorus so often that the chorus slide would crack. This assertion was picked up and lampooned by the music trade press as an outstanding example of hopeless exaggeration.

As films became longer, movie theatres began acquiring a second projector. This eliminated the delay of changing reels, and with it the need for filler material. By 1912, many of the picture houses were illustrating songs, if at all, with just one or two slides. Usually these depicted either the song title or the sheet-music cover. Theatre owners were waiting for a new form of song illustration using motion pictures, which they termed "motion slides." Experiments with the new form had already been tried, but thus far were held to be unsatisfactory.

Experiments with illustrated classical music were also underway at that time. Program music itself goes back many hundreds of years before the ideas of plot, poem, and picture were developed by Beethoven, Jannequin (1475-1560) made imitative, descriptive music his specialty. He wrote tone-pictures of birds, battles, and the street cries of Paris. In the latter part of the Nineteenth Century it became fashionable for composers to select great (and-not-so-great) paintings as subjects. Moussorgsky's Pictures at an Exhibition (1874) was preceded by Liszt's symphonic poem "Hunnenschlacht" (1857), on a painting by Kaulbach. Some critics found the practice annoying, because it was much more difficult for the audience to recall a picture than a book or a poem. (Today with our much more image-oriented culture, and consequently highly-developed visual memory, the situation is quite the reverse.) One solution was presented in the early 1900's in France at the performance of Edmond Malherbe's "Jugement de Paris." This symphonic poem was suggested by Paul Baudry's painting on the ceiling of the Grand Opera. A reproduction of the picture was printed right on the concert program. Another oftproposed idea was to hang the original painting on the concert stage. Critics were quick to commend composers if their visual music could be enjoyed and appreciated in spite of any visual links. We now come to the strange and delightful case of Mrs. Margaret Watts Hughes of London, singer of daisies, pansies, and geometrical patterns. Her performances in 1908 made use of a device based on an acoustical discovery by Chladni in 1785: glass or metal plates vibrate in different patterns, depending on where and how they are excited, and also on where they are damped. Chladni scattered sand on the surface of a plate. As it vibrated, the sand danced over the surface, finally grouping into well-defined ridges that separated the vibrational modes. Strehlke and Faraday added various fluids to the sand, which retarded its motion so that it could be seen and studied. Then they substituted lycopodium powder, a very fine dust, for the sand. This powder was so light that it became entangled in the tiny whirlwinds of air

produced by the vibrations. The lycopodium could not be driven away from the vibrational modes, though the heavier sand would readily escape. By combining the liquid and the lycopodium, a paste was created that would agitate continuously, in symmetrical circular patterns, whenever the surface underneath was made to vibrate strongly enough.

Making use of these experiments, Mrs. Hughes assembled a contraption consisting of a megaphone attached to a tube that led into a bowl. Over the top of the bowl she stretched a silk membrane. By singing into the megaphone, the silk would vibrate, and with it the little heap of lycopodium paste placed on the silk. To form a daisy, Mrs. Hughes softly sang a single note, slowly increasing the volume until the paste began to move. As she sang louder, the image of a flower with petals began to emerge. As she alternated between soft and loud, the image fell back into the little heap and then the petals darted out again, each time clearer than before. Finally it crystallized into a daisy shape. Some of the flowers had vein-like lines on the petals. Others were ringed with rows of tiny dots, or with petals overlapping each other.

Mrs. Hughes performed entire songs using dust instead of paste, producing geometrical patterns that could change quickly with each note. Since each pitch consistently produced its own unique pattern, a one-to-one relationship existed between the patterns and the musical scale. This limited the potential for visual development. The slower-tannging paste, on the other hand, sometimes adopted a life of its own. Occasionally the mass would travel unpredictably across the surface of the silk.

During all these activities, live music and the silent film were solidifying their partnership. Its considerable development is beyond the scope of this article, but the beginnings may be noted chiefly as improvised accompaniments by a pianist (or an organist in the larger theatres). Publishers soon developed special volumes to supply classified music to these performers. Burglar scenes, comedies, cavalry charges, murders, and dozens of other everyday movie situations were conveniently indexed. In 1914, it was reported in a music trade magazine that Humperdinck had just written music for an Italian religious film drama. This launched enthusiastic speculation that before long it might well become common for serious composers to write complete scores for motion pictures. The writer recommended that composers prepare by studying the "haphazard" improvisational style of Slavic and Hungarian music. By imitating the methods of the "mad Magyars," composers could learn to adapt to the ever-changing scenes and moods in films.

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